

George Bernard Shaw observed prophetically in his famous work, *Man and Superman*: “in the art of killing man outdoes nature itself.... When he goes out to slay, he carries a marvel of mechanism that lets loose at the touch of his finger, all the hidden molecular energies and leaves the javelin, the arrow, the blow pipe of his fore-fathers far behind.”¹ This is precisely what Indian nuclear scientists achieved when India blasted its way into the nuclear club on May 11 and 13, 1998, with a series of five nuclear tests. The scientists and defense officials loudly trumpeted this achievement and its supposed benefits for India, but their arguments miss reality. The theory of deterrence that they have put forward to justify the tests is specious. And the economic costs of trying to create a real nuclear deterrent would seriously hurt India’s development needs. In this viewpoint, I argue that India was better served by its earlier consensus on the legacy of India’s first prime minister, Jawaharlal Nehru. A policy that maintained nuclear ambiguity while seeking disarmament, and emphasized development over military power, created more security than the current effort to declare a minimum nuclear deterrent without the existence of a clear second-strike capability.

THE ROLE OF SCIENTISTS

Many of the original Manhattan Project scientists were modest and even repentant about the first-ever atomic bomb test, the Trinity test conducted at Alamogordo, New Mexico, on July 16, 1945. Robert Oppenheimer exclaimed, quoting from the *Bhagavat Gita*, “I am become death, destroyer of worlds.” Earlier, Nils Bohr cautioned President Roosevelt on July 3, 1944, “a weapon of unparalleled power is being created which will completely change all future conditions of warfare.”²

The Indian scientists were more provocative and immodest about India’s nuclear tests. India’s “missile man,” the chief scientific advisor to the defense minister, A.P.J. Abdul Kalam, boasted that the tests conferred on India a capability to neutralize any nuclear threats to the country. He added, “Nuclear weaponisation is now complete.

We have a reliable size, weight, performance and environmental conditions for nuclear weaponisation.”³ R. Chidambaram, chairman of the Atomic Energy Commission (AEC), corroborated, “Weaponisation is now possible.”⁴

VIEWPOINT: INDIA’S DETERRENCE DOCTRINE: A NEHRUVIAN CRITIQUE

by T.T. Poulouse

Far from being simple instruments of state policy or a national consensus, these scientists were “the most persistent and powerful group lobbying for India’s overt nuclearization.”⁵ This has recently been made clear by former Prime Minister Deve Gowda. He noted that these “scientists had approached two previous governments

to continue the tests in 1995 and 1997.” He also disclosed: “I was requested to make a decision. I convinced the scientists that the time was not ripe.”⁶ Strangely, the nuclear establishment in India (unlike the enlightened political leadership, which campaigned for the abolition of nuclear weapons) was for the “bomb” from its formative years. Dr. Homi Bhabha, the first AEC chairman, headed this small group of top scientists in India. This dedicated group was determined to build nuclear weapons and ballistic missiles for India. But the political leaders vacillated for the last 50 years, until the Bharatiya Janata Party (BJP), the right-wing Hindu nationalist party (as it is described in the Western media) achieved political power.

Raja Ramanna, the father of the first atomic test by India in 1974 (referred to as “Pokhran I,” after the desert site where tests are conducted) claimed that, with this year’s tests (“Pokhran II”), “science has given security

*T.T. Poulouse is Professor (retired) and former Chairman of the Disarmament Division of the School of International Studies, Jawaharlal Nehru University, New Delhi, India. During 1980-81, he was a visiting scholar at the Center for Science and International Affairs, Harvard University. He has published several books, including **The CTBT and the Rise of Nuclear Nationalism in India** (Lancers, 1996), **The United Nations and Nuclear Proliferation** (D.K. Publishers, 1988), and **Nuclear Proliferation and the Third World** (ABC Publishers, 1982).*

to India.”⁷ He declared in the Indian Parliament on May 28, 1998, that the nuclear scientists should not be in “suspended animation” about the nuclear tests.⁸ The rationale of the scientists has been expressed by Abdul Kalam, as “strength respects strength.”⁹ Beyond their dubious security claims, the scientists have also promised with these weapons of mass destruction to make India a developed country by 2020.

Political sociologist Ashis Nandy has exposed the exaggerated claims of the nuclear scientists:

It is also becoming increasingly obvious that what is touted as a great scientific achievement is nothing of the kind. It is technology of the 1950s and 1960s, recycled and flaunted as a major breakthrough. The knowledge on which the Indian explosions are based would not fetch a research degree in even a second rate university. Most resources for Indian nuclear weapons are stolen from India’s nuclear energy program. They were diverted from the program that was supposed to be peaceful and development-oriented but was floundering in both efficiency and delivery.

He added, “Most of the resources used in nuclear weapon research were foreign, now they are mostly Indian in the sense in which Coca Cola and Cadbury’s are Indian.”¹⁰

Although the Western media emphasized the domestic support for these nuclear tests, in fact they generated a storm of protest among the scientific community, most prominently among the younger generation of Indian scientists. The protesters even included 92 senior scientists belonging to the Bhabha Atomic Research Centre, the Defence Research and Development Organization, and the Council for Scientific and Industrial Research. According to a statement issued by the scientific organization that sponsored one protest march, these scientists were asking: “Can we feel happy and secure in a world in which every country feels proud of its nuclear weapons capability and is convinced of the deterrence tactics?”¹¹

The Pokhran II tests have demonstrated that India has mastered the technological prowess to design a variety of nuclear weapons, including the hydrogen bomb. It has also proved India’s superiority in nuclear weapon technology relative to Pakistan. But the fact remains that India lags far behind the Chinese operational nuclear force, as India has yet to complete its weaponization

program. The Chinese possess a strategic triad consisting of land-based intercontinental ballistic missiles (ICBMs), submarine-launched ballistic missiles (SLBMs), and long-range strategic bombers. India is really a nuclear infant when compared to China, let alone the Cold War-era superpowers. While Indian nuclear scientists talk arrogantly about their recent achievements, they should instead be guided by these enormous shortcomings. Such limitations should also act as a sobering influence on misguided politicians like George Fernandes, India’s defense minister, with his unbridled utterances about China as India’s “potential enemy number one.”

NATIONAL SECURITY IMPLICATIONS

Nuclear tests have serious security implications. With a great sense of national pride, one can argue that, in defense of the supreme national interest, a government might even have to defy the international community and be prepared to pay the price for its decision to go nuclear. But it would be tragic if India’s tests turn out to be the misguided decision of a small group of scientists or of a government simply trying to maintain power to further its narrow, jingoistic ideology.

There are serious security consequences arising as a result of Pokhran II. First, in one stroke India has made itself a potential target of six nuclear adversaries, consisting of the five nuclear weapon states and Pakistan. Second, the induction of nuclear weapons in India is already heightening tensions on the sub-continent and with China. The low intensity conflict in Kashmir is escalating. Nuclear weapons will also have a deleterious effect on the territorial disputes between India and Pakistan, on the one hand, and India and China, on the other. It has virtually frozen all their territorial disputes. Nuclear weapons cannot help resolve local disputes, and it will prove counterproductive for broader political relations in the region to have sought leverage from the bomb.

Third, the chances of India getting U.N. Security Council membership have been ruined by its nuclear tests. The United States and China will certainly use their veto, if necessary, to prevent India’s membership in the Security Council.

Fourth, after India and Pakistan crossed the Rubicon by conducting nuclear tests, the South Asian nuclear non-proliferation regime lost its relevance. As long as both countries pursued a policy of nuclear ambivalence, there

was a slender chance of rescuing the effort to establish a nuclear-weapon-free zone in South Asia. In fact, after India's nuclear explosion in 1974, Pakistan introduced the first U.N. resolution in the General Assembly for the establishment of a South Asian nuclear-weapon-free zone (NWFZ). India had been a supporter of regional nuclear-weapon-free zones, and hence it supported the concept of the South Asian NWFZ while opposing the specific Pakistani resolution year after year. However, in 1982, India withdrew its support for the concept on the grounds that the global reach of the superpower ICBMs rendered regional nuclear-weapon-free zones unworkable. But these missiles and their nuclear warheads existed even before, so why did India support NWFZs until then? As long as India did not exercise its nuclear option, its threshold-state status was compatible with a possible decision to renew support for a regional nuclear-weapon-free zone.

Finally, there are financial burdens. India will have to carry the burden of economic sanctions imposed on her by several states and international organizations. Germany has already suspended \$400 million in aid to India. Japan has also suspended its \$1 billion in aid. Under the U.S. Nuclear Proliferation Prevention Act of 1994, U.S. sanctions automatically apply to India. Besides the fact that the United States will try to keep certain international sources of aid from flowing to India, it will also ban the export of certain defense-related high technology materials. It is likely that this ban will affect India's main battle tank (MBT) and light combat aircraft (LCA) programs. All of this could lead to price rises, inflationary trends, a fall in the rupee's value, and other unpredictable signs of a shaky market.

THE EVOLUTION OF INDIA'S VIEWS ON DETERRENCE

The official Indian view on deterrence prior to Pokhran II had been very critical of the concept. Prime Minister Indira Gandhi said in 1974 that India "forcefully rejects the concept of nuclear deterrence as repugnant and strategically unworkable."¹² She reiterated in a speech at Helsinki on June 10, 1983, "we do not believe in the theory of deterrence." More significantly, she told the Indian Parliament on August 22, 1984, that Pakistan's nuclear bomb "does not make a big difference," since China and other countries already possessed these weapons. Similarly, Rajiv Gandhi, after he became prime minister, said in an interview to a Pakistani editor of

Muslim, Mushahid Hussain, on April 22, 1985: "I have never subscribed to the view that terror balances.... A nuclear arms race in the subcontinent would only subject both our people to the worst possible fate on earth."¹³

The Indian bureaucracy, while serving their political masters, often reflected the official thinking in their writings. Thus, in 1981, K. Subrahmanyam, a leading Indian defense expert, described deterrence as a myth.¹⁴ Yet, when he was appointed as chairman of the U.N. Expert Committee on Deterrence in 1984, his views on deterrence suddenly underwent a change. He now said, "Deterrence is a fact of life." About the doctrine of deterrence, he observed: "Those who believed that they were able to exercise deterrence through their nuclear arsenals were, in turn, bound to be deterred by the nuclear arsenals of others. In that sense, the doctrine of nuclear deterrence was a self-fulfilling prophesy."¹⁵

Other bureaucrats, at least until their retirement, continued to be critical of deterrence as long as government policy was against the doctrine of deterrence. Participating in the Conference on Disarmament in Geneva, A.P. Venkateswaran, a former foreign secretary, stated on February 3, 1981, that India was opposed to the doctrine of deterrence as the "so-called deterrence keeps feeding on itself requiring a continuous escalation of weapons systems in the vain search for the will-o-the-wisp of strategic superiority." Hence, he said: "To my delegation, it is obvious that the nuclear arms race cannot be controlled or checked, as long as the concept of deterrence remains the central feature of the nuclear landscape." He also criticized the view that "national defense is incomplete without the possession of nuclear weapons."¹⁶ Venkateswaran's statements suggested a certain aversion to nuclear weapons. But today, like Subrahmanyam, Venkateswaran is an unrepentant advocate of nuclear deterrent capability for India.

India's most coherent critique of deterrence was revealed when the International Court of Justice (ICJ) considered the legality of nuclear weapons in 1995. India told the ICJ: "Nuclear deterrence had been considered abhorrent to human sentiment since it implies that a state if required to defend its own existence will act with pitiless disregard for the consequences to its own and its adversary's people." India maintained in its submission to the world court that deterrence provided an incentive to run a nuclear arms race in order to sustain the superiority "necessary for deterrence and this would keep humanity in the perpetual fear of total destruction." Hence,

India argued that nuclear weapons should be declared illegal and “their production and manufacture cannot under any circumstances be considered as permitted.”¹⁷

After Pokhran II, however, India began to sound more deterrence-friendly. George Fernandes, India’s defense minister, explained the strategic rationale for India’s nuclear tests: “if we had to go nuclear, it was for the purpose of possessing a nuclear deterrent that would enable us to tackle some of the threats that we faced and only that.”¹⁸ This formulation had the approval of the prime minister, who stated in Parliament that India’s nuclear bomb was for defense and deterrence.

However, the political leadership was preoccupied by efforts to survive continuous wrangling within its parliamentary alliance. It had little time to assimilate the strategic significance of Pokhran II and the long-term implications of India’s nuclear weapons program. On account of the relentless pressure from the international community and the sanctions they imposed, India announced a moratorium on its nuclear tests on May 22, 1998, and later expressed its readiness to transform this *de facto* position into a *de jure* obligation. The Indian deterrence debate, which was a mere charade in the pre-Pokhran II period, began to resemble an actual strategic formula.

Prime Minister Atal Behari Vajpayee presented the brief outline of India’s nuclear doctrine to the Indian Parliament on August 4, 1998. Vajpayee described three components of India’s new doctrine: (1) “In order to ensure that our independence and integrity are never jeopardised, we will have a policy of minimum deterrent”; (2) “we will not be the first to use nuclear weapons”; and (3) “having stated that we shall not be the first to use nuclear weapons, there remains no basis for their use against countries which do not have nuclear weapons.” His statement also confirmed the moratorium on nuclear tests and said India might still decide to adhere to the Comprehensive Test Ban Treaty (CTBT), an offer Vajpayee repeated at the United Nations in September 1998. But the prime minister’s earlier speech in August also left the door open to possible resumption of testing: “In announcing the moratorium we reflected our own commitment to disarmament [and] also addressed the general wish of the international community. Naturally, India reserves the right to review this decision if in its judgement extraordinary events take place that jeopardise India’s supreme national interests.”¹⁹

The logic of India’s emerging policy on deterrence makes such resumption likely, despite Vajpayee’s offer at the United Nations to sign the CTBT if certain conditions were met. Nuclear testing is a strategic requirement if India wants to weaponize to the level its declared strategy of minimum deterrence requires. Even the Agni, India’s intermediate-range ballistic missile, has to be tested further if India is to achieve the ability to deliver its warheads to the heartland of China. Beyond that, India will need a missile of intercontinental range. Without an ICBM, India cannot deploy a full-fledged minimum deterrent against China. Hence, the moratorium is bound to be broken as more nuclear and missile tests will be needed to build a minimum deterrent. India has gone back on its arms control decisions in the past. The prime minister’s statement to the Parliament on August 4, 1998, anticipates this eventuality.

There used to be something unique about India in its relentless campaign against nuclear weapons and for abolition. Perhaps no other country has been in the forefront of such a global movement for as long as India. Even when faced with two nuclear adversaries in its backyard, India did not budge from its commitment to stay a threshold nuclear state until recently. Whether India should break out of its chosen path of nuclear restraint and overtly go for the “bomb” remained an open-ended issue, until India conducted the nuclear tests in May 1998.

All past governments refused to weaponize India’s nuclear program, even when relations with Pakistan and China were far worse than today. Only the BJP has held a view similar to that of the “bomb lobby.” Other shades of nuclear thinking in the country include that of the rural poor, the Gandhians, the environmentalists, and those who stand for a more moderate nuclear policy. These groups were the primary supporters of the Nehruvian legacy in nuclear matters. The Nehruvian perspective holds that morally, politically, and strategically, it is wiser and safer for India not to acquire nuclear weapons. Despite polls taken immediately after the tests that showed support for them in India’s largest cities, as an Indian myself, I am convinced that the Nehruvian position is the one supported by the vast majority of the Indian people.

Basically, the deterrence debate in India reflects an underlying conflict of interest between the rural poor, representing 70 percent of India and aspiring to come out of poverty, and a tyrannical minority of the urban power elite, whose goal is the acquisition of nuclear

weapons and augmentation of India's military might, even at the expense of the poor. Although India is already the fourth largest military power in the world, the bomb proponents were not satisfied. They wanted India to join the nuclear club, regardless of whether India is poor or not. According to them, China is also a poor nation and yet a member of the nuclear club. Their desire to use nuclear weapons as the currency of power was unlimited. For them, economic development is secondary to military growth.

Two propositions in justification of the policy change have been advanced by the advocates of a declared nuclear weapon status: one, a perceived nuclear threat to India's security; and two, an ambition to "seek a place in the sun," for reasons of prestige and power in international politics. A degree of nuclear threat to India from neighboring nuclear-capable states cannot be denied, though it would be difficult to show any evidence that China has ever threatened or blackmailed India with its nuclear capability. True, a nuclear asymmetry between India and China exists. But India's response to a nuclear China, an acknowledged adversary, had long been a decision to live with the Chinese nuclear threat. Nothing had taken place that suggested a need to change that policy when the BJP government conducted nuclear tests. Although India's defense experts regularly play up the Pakistani nuclear threat, India's overall military superiority means it is better equipped to deal with a nuclear crisis initiated by Pakistan. As a matter of fact, India's earlier nuclear policy, based on retaining her nuclear option, was a well-conceived strategy through which India could continue to update her nuclear capability incrementally without draining scarce economic resources. A precipitate nuclear arms race, on the other hand, with China and Pakistan is not only unwarranted but also unwise politically, economically, and strategically. Subsequent sections describe the strategic, economic, and political problems with India's policy, respectively.

THE FALLACY OF SEEKING AN INDIAN VERSION OF DETERRENCE

Although India has become a nuclear weapon state, it does not have a doctrine that could help it ride out a possible nuclear crisis. India's nuclear hawks and the power elite who played midwife to the safe delivery of the "bomb" at Pokhran have not formulated a coherent strategy for how to avoid a nuclear war. In the United

States, by contrast, in the early years of its nuclearization, several conceptual studies helped to evolve a sophisticated understanding of the requirements for stable deterrence. The theory and reality of mutual assured destruction (MAD) created a strategic stalemate lasting the entire Cold War period between the central strategic forces of the United States and the former Soviet Union. As a result, they avoided a nuclear holocaust.

In contrast, while India's fledgling nuclear capability is sufficient to deter Pakistan, it does not have a nuclear force adequate to deal with China's sizeable nuclear arsenal and ballistic missiles that can reach any target in India. Only by virtue of the possession of readily usable nuclear warheads and delivery systems for instant retaliation in the aftermath of an enemy attack can a state be certain that it has acquired a deterrent capability. The "mutual deterrence" of the superpowers in the Cold War years was based on the capability to inflict unacceptable damage on a nuclear adversary even after absorbing a first strike. Only the fear of complete destruction, even if one got in the first blow, averted a nuclear war between the two. Does India possess such an instant retaliatory capability after Pokhran II?

There is a tendency among Indian defense experts, as well as some outside observers, to offer an Indian version of nuclear deterrence. Before India's tests, Indian defense analysts and outside observers used terms like "recessed" and "non-weaponized"²⁰ deterrence to describe India's capabilities. These were attempts to hypothesize the existence of nuclear deterrence between India and Pakistan without overt nuclearization. The idea that this created effective nuclear deterrence was simply a gimmick to influence public opinion, but no military establishment would be prepared to buy such an argument. There have recently been some academic inquiries into the possibility of "virtual" deterrence,²¹ but these are hypothetical propositions that have not been tested or proven in the real world. No responsible military official or civilian command authority in any existing nuclear weapons state has ever based policy on these notions. Indeed, nuclear targeters have historically sought even more weapons than MAD requires. There is no reason to believe that Indian or Pakistani decisionmakers will act differently in the end, or that their potential adversaries will truly be deterred if they do opt for arsenals that are not weaponized to a level that provides a credible second-strike capability. For actual national leaders, deterrence has always been about a certain vis-

ible capability that either does or does not exist in reality. It is fallacious to particularize deterrence as an Indian version or a Pakistani version. Only the possession of an operational nuclear force can endow a state with deterrence. Because top military officials in India are likely to feel the same way, the attempt to create an effective deterrent will likely impose serious economic and social costs on the country.

NUCLEAR WEAPONIZATION COST ESTIMATES

India's power elite has never shed any tears for the poor. Poverty, squalor, ill health, illiteracy, and mass superstition—the inescapable problems of a poor nation like India—do not bother them. But for the rural poor, development is security. The social cost of nuclear weapons should have a serious bearing on any future nuclear weapons program, especially in India, where one-third of the world's poor live. In this section, I show that the costs are likely to be prohibitive.

General Sunderji, a distinguished defense expert and former army chief, knows that deterrence cannot be crafted on mere conjunctures about “recessed” or “virtual” capabilities. He has, therefore, argued coherently since before Pokhran II for the creation of a minimum deterrent capability resembling that of the secondary nuclear weapon states, the United Kingdom, France, and China. General Sunderji has done a cost analysis for building a minimum deterrent capability. For a force of 90 to 135 fission bombs, based on 45 short-range Prithvi missiles and 30 Agnis, he estimated the overall cost at 27.6 billion rupees. According to General Sunderji, this would be 10 percent of the defense budget or .03 percent of the GNP.²²

Other studies, however, suggest this estimate is too low by perhaps a factor of 10. According to an earlier study, ordered by then Prime Minister Rajiv Gandhi and conducted by the Defence Ministry under General Sunderji's chairmanship, the creation of a modest nuclear force for India would cost a sum of 70 billion rupees. This figure has gone up to 180 billion rupees according to current estimates and would actually be 240 billion rupees on account of the depreciation of the rupee's value. The organizers of the Movement in India for Nuclear Disarmament (MIND) have estimated in a recent study that weaponization of India's nuclear program would cost 200 billion rupees over and above the annual defense budget and an additional 160 billion ru-

pees for maintenance and for command, control, and communications.²³ At October 1998 exchange rates with the United States, the total MIND estimate would amount to \$8.5 billion. If one accepts the updated cost estimate for the original Rajiv Gandhi study, this still amounts to \$5.6 billion.

However, even these higher estimates are probably too low if India actually wants a credible deterrent. The government has no clear standards to determine what constitutes “enough” in regard to the number of warheads and delivery systems. Assuming that it can work out the magic number in the case of Pakistan, the relative uncertainty about “essential equivalence” vis-a-vis China will still have to be resolved.

Despite the BJP's proclamations of a minimum deterrence strategy, the fact is that India does not have a minimum deterrent capability against China and cannot achieve such a capability except at tremendous further expense. The weapons-grade fissile materials available now are good enough for about 75 to 80 fission bombs. General Sunderji's minimum deterrent proposal called for 135 warheads. However, China currently has about 400 nuclear warheads, comprising fission bombs and thermonuclear devices; some of the warheads have four to five megatons yield. The most significant factor about Chinese nuclear capability is that it has a strategic triad consisting of ICBMs, SLBMs, and strategic bombers. These nuclear weapons could be targeted against any place in India, not only from Tibet but also from deep inside China itself. To be able to convincingly threaten China with unacceptable damage in a retaliatory strike, India will have to increase its production of fissile materials and conduct many more nuclear and missile tests in order to develop and deploy long-range weapons in sufficient number.

Until some other theory is proven in operation, any prudent planner concerned about a state's security will have to assume that functional deterrence is predicated on having a second-strike capability against any other nuclear weapon state. A beginner state like India that enters the nuclear arms race so late does not possess the ability to escape a missile strike from an existing nuclear weapon state like China. India does not have a strategic triad. In the case of the United States, SLBMs have provided the most secure second-strike capability, but India has yet to deploy such systems. It is also doubtful that India has early warning radar systems that could give advance warning of the launch of Chinese missiles.

The same may be said about the command, control, communications, and intelligence system. Is the air defense system sufficient to protect India's strategic forces? It is likely that in a Chinese first strike, virtually all of India's warheads and missiles would be destroyed by China's more accurate missiles with their more powerful thermonuclear warheads. Hence, India would be left with no nuclear capability to strike back and inflict on China the extent of damage necessary to maintain a credible deterrent. All the reasoning of India's strategic experts for a minimum deterrent capability might instead end up incinerating millions and millions of innocent Indian people, because of the failure of India's nuclear strategy.

Deterrence should not fail if a country has capable and invulnerable forces, tied to a credible declaratory strategy. India's deterrent does not meet these criteria. The urge to compete with the Chinese in a nuclear arms race, while the rest of the international community is engaged in reversing the nuclear arms race, reducing nuclear arsenals, and negotiating for the final elimination of nuclear weapons, will be disastrous. If such a plan does not destroy India in a nuclear confrontation, it will make her economically bankrupt like the former Soviet Union. With all its nuclear might, the Soviet Union could not save itself from self-destruction.

It is a fallacious assumption that India's minimum deterrence can save her from a Chinese nuclear attack, unless India competes with China to build a credible deterrent based on an invulnerable second-strike capability. To sustain such deterrence will require running a nuclear arms race. This symbiotic relationship between deterrence and the arms race ruined the Soviet economy and eventually destroyed the Soviet state. In the case of a new nuclear weapon state with primitive nuclear weapons trying to compete against an adversary with more sophisticated nuclear capability, the former has an incentive to try to catch up, but the latter will seek just as hard to keep its lead. Hence, the contention that India can achieve deterrence stability by mutual agreement with her nuclear adversaries Pakistan and China, implying that there need not be a nuclear arms race, is highly questionable. It is like riding a tiger. Instead of buying security, India might end up with more insecurity. It is too late to start a nuclear arms race against China.

POLITICAL CONSEQUENCES IN THE REGION

One of the outcomes of India's leisurely approach to deterrence is that it creates a status quo situation, freezing all political and other disputes forever. If this is going to be the end result of an expensive nuclear weapons program, one might be tempted to ask: why all this hue and cry just to create a situation in which everything is in a state of suspended animation? In the case of India and Pakistan, deterrence is neither capable nor credible. Hence, it cannot be used as a bargaining chip to settle any outstanding political dispute. A military competition that will freeze all political disputes is likely to lead to only one conclusion: a nuclear war out of sheer frustration, just the opposite of what the advocates of a minimum deterrent for India had hoped for.

A nuclear weapons program was perceived by Pakistan as a means to obtain certain political gains like resolving the Kashmir dispute. According to the protagonists of an Indian nuclear weapons program, the freezing of all disputes will be to India's advantage, as Kashmir will continue to stay with India. But China is the real beneficiary in the status quo situation created by India's nuclear deterrent. China can keep the disputed territory of Aksai Chin and retain its hold on other disputed territories claimed by India. All these disputes will remain frozen as long as the Indian minimum deterrent lasts. It is a strange irony that the nuclear weapons program, which was intended to provide more security to India and to be used for hard bargaining, will be helpless to resolve India's border disputes with China.

If India's strategic objective, on the other hand, is to break the Chinese nuclear weapon monopoly in Asia, another state like Japan or Indonesia may decide to break the nuclear duopoly of both China and India. Pakistan has already broken India's nuclear monopoly in South Asia. Because its neighbors can and will respond to India's actions, in the end there are no political advantages India can gain in its regional relations from its decision to go nuclear.

CONCLUSION

As Kenneth Waltz observes, "deterrence in abeyance" based on "virtual arsenals" will not work, because a "strategy inadequate for the fighting of wars cannot deter." He adds: "For two closely connected reasons, a system of virtual arsenals is untenable. First, deterrence

without second-strike forces will not work. Second, a system of virtual arsenals would be unstable. (...) A latent nuclear force is at best a shaky deterrent at home; it will find no credit abroad.”²⁴ Although India is claiming the status of a nuclear weapon state by virtue of its nuclear tests, in terms of its nuclear stockpiles, India, like Pakistan, will have the dubious distinction of having only a “virtual nuclear arsenal,” until its weaponization is complete. Yet the weaponization process has the potential to bankrupt India, and will leave it less secure against more advanced nuclear adversaries.

Early in the nuclear age, Albert Einstein observed, “the unleashed power of the atom has changed everything save our modes of thinking and thus we drift towards unparalleled catastrophe.” The reaffirmation by the nuclear hegemon of the doctrine of deterrence, even after the end of the Cold War, only reinforces Einstein’s belief. But the nuclear theology of the Cold War has been increasingly questioned. India’s policy better served its security and its people when it took part in this questioning of the madness of other countries’ nuclear build-ups. Given the logical flaws in the BJP’s minimum deterrent strategy and the social costs it will impose on India’s population, it is time for India’s leaders to relearn their earlier critique of deterrence and restore the country’s Nehruvian tradition on nuclear issues.

30, 1998 (<http://www.hindustantimes.com>).

¹³ Indira Gandhi quotes from 1983 and 1984, and Rajiv Gandhi quote from 1985, cited in A.G. Noorani, *Indian Express*, July 12, 1985.

¹⁴ K. Subrahmanyam, “The Myth of Deterrence” in K. Subrahmanyam, ed., *Nuclear Myths and Realities: India’s Dilemma* (New Delhi: ABC Publishing House, 1981), pp. 52-70.

¹⁵ Institute of Defense Studies and Analyses, *Strategic Digest*, January 1987, p. 67.

¹⁶ Conference on Disarmament Document CD/PV 101, February 3, 1981, pp. 37-43.

¹⁷ Quoted in *Hindustan Times*, July 30, 1998.

¹⁸ “Fernandes: US nuclear policy is hypocritical,” *Hindustan Times*, June 19, 1998 (<http://www.hindustantimes.com>).

¹⁹ “CTBT only after Parliament’s nod: PM,” *Hindustan Times*, August 5, 1998 (<http://www.hindustantimes.com>).

²⁰ George Perkovich, “A Nuclear Third Way in South Asia,” *Foreign Policy* no. 91 (Summer 1993), pp. 85-104.

²¹ Michael J. Mazarr, ed., *Nuclear Weapons in a Transformed World: The Challenge of Virtual Nuclear Arsenals* (New York: St. Martin’s Press, 1997).

²² *Indian Express*, April 6, 1996; also see the text of his lecture on “National Security” under the auspices of United Services Institution, New Delhi, in Gen. K. Sunderji, *Blind Men of Hindoostan: Indo – Pak Nuclear War* (New Delhi: UBS Publishers’ Distributors, 1993).

²³ Both estimates reported in *Hindustan Times*, June 9, 1998.

²⁴ Kenneth Waltz, “Thoughts about Virtual Nuclear Arsenals,” *The Washington Quarterly* 20 (Summer 1997), p. 155.

¹ George Bernard Shaw, “Man and Superman,” in Haskell M. Bloak and Robert G. Shedd, eds., *Masters of Modern Drama* (New York: Random House, 1962), p. 337.

² Quoted in T.T. Poulouse, “Race to Oblivion or Survival,” *Religion and Society* XXX (December 1986), pp. 5-6.

³ Dinesh Kumar, “N-weaponisation is now complete: Kalam,” *Times of India*, May 18, 1998 (<http://www.timesofindia.com>).

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⁵ Praful Bidwai, “Our Science Militarised,” *Times of India*, July 1, 1998 (<http://www.timesofindia.com>).

⁶ *Ibid.*

⁷ “India: Indian Nuclear Scientist Interviewed on Tests,” *Deccan Herald*, May 21, 1998; in FBIS-TAC-98-141 (21 May 1998).

⁸ *Times of India*, August 9, 1998.

⁹ “The Rediff Interview: APJ Abdul Kalam,” *Rediff on the Net*, October 13, 1998 (<http://www.rediff.com>).

¹⁰ Ashis Nandy, “Decline in Euphoria,” *Hindustan Times*, July 4, 1998 (<http://www.hindustantimes.com>).

¹¹ *Peace and Solidarity* 25 (May – July 1998), pp. 5-6.

¹² Kamal Mitra Chenoy, “Nuclear Destabilization,” *Hindustan Times*, July